ABSTRACT OF THE DISCLOSURE

A liquid crystal composition comprising a liquid crystal compound, a gelling agent comprising a hydrogen-bonded compound with polymerizable double bonds at both ends to form a gelatinizable mixture with the liquid crystal compound, and a photoinitiator causing a polymerization reaction of the hydrogen-bonded compound of the gelling agent is disclosed. Because the denatured liquid crystal composition, obtainable by photo polymerization of the non-denatured liquid crystal composition, has alignment direction self-control characteristics, the liquid crystal composition can be reversibly changed between the isotropic state and the aligned gelatinized state by controlling the temperature conditions not only in a non-denatured state but also in a denatured state. A liquid crystal display element using the liquid crystal composition, a method for manufacturing the same, and a method for controlling the same are also disclosed.